## PROCEEDINGS

OF THE

## BIOLOGICAL SOCIETY OF WASHINGTON

## NOTES ON A PIPEFISH FROM THE MID-NORTH ATLANTIC.

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In October, 1901, the U. S. Fish Commission received two specimens of pipefish from Lieut.-Commander James H. Sears, U. S. N., in charge of the Branch Hydrographic Office at New York. They were handed him by Captain Henry Eagleton of the S. S. *Trojan Prince*, with the information that they had been saved from a mass of 20 or more that had fouled the patent log during the night of October 16, in Lat. 44.5° North; Long. 33° West, causing an error of about 25°.

Captain Eagleton stated that the first officer was observed clearing the log of a mass of what he supposed were "marine worms" and the captain was in time to save two specimens. When these specimens were received by the Bureau of Fisheries they were rather badly broken; one lacking a portion of the head only was sufficiently intact to permit of positive identification. The other specimen lacked the head and a portion of the tail. Upon examination they proved to be the young of Nerophis aequoreus (Linnæus), a common European species. Günther\* gives its geographic distribution as, "Northern and western Europe; New Orleans." As this species has never been noticed on the coasts of America, Günther's reference to New Orleans is doubtless an error.

Couch† says, "It is more an inhabitant of the open ocean, where, in summer, fishermen report that they see it near the surface over a depth of more than fifty fathoms, at a distance from land of ten or fifteen leagues."

<sup>\*</sup> Cat. Fish. Brit. Mus., VIII, 191, 1870.

<sup>†</sup>Fishes of the British Islands.

The most western records are from the neighborhood of the Azores. The British Museum has specimens from north of the Azores. In a report (1896) on the fishes collected during explorations by the Prince of Monaco's yacht *L'Hirondelle*, in 1885–1888, Collett records a specimen from Lat. 39° 22′ 48″ N.; Long. 33° 45′ 30″ W., taken at the surface over 1384 metres.

The locality from which the present specimens were obtained lies about in a direct line between the southern end of Cape Sambro, Nova Scotia, and the south point at the entrance of Bassin d'Arachon, Atlantic coast of southern France; and northward of the Azores, a little east, but some 360 nautical miles north of the Hirondelle station.

Conch states that it "abounds in incalculable numbers from near the shore to several miles in the open sea; and it is then they appear to perform a perhaps limited migration or change of quarters; for they swarm at the surface in fine weather from the early part of summer to its declination; but after this time they are not seen and perhaps have gone to the bottom and into deep water."

Owing to their structure, their swimming powers are limited and their migrations restricted to such as they accomplish by taking passage on a piece of floating seaweed, to which they attach themselves by their somewhat prehensile tail. The direction of the migration, therefore, is dependent mainly upon tides and currents, and those found north of the Azores probably reached those places by this means.

This species attains the largest size of any of the pipe fishes. Individuals are said to have been observed having a length of 2 or 3 feet, but as commonly met with they are not so long.

An interesting account illustrating the size attained by this fish is given by Blake-Knox, Zoology, 1866, p. 508:

"Last winter I met with an immense fish of this kind. Seeing a boy whacking a donkey with a gutta percha stick, as I thought, I asked him where he got it. 'It's only the stock of a snot (seaweed), sir; see?' and I did see a fine æquoreal 3 feet 5 inches long. Of its toughness you may judge. It is not uncommonly taken in baskets with whelks and crabs.'

As previously mentioned, the present specimens are young individuals, the most perfect specimen being about 7 inches

Nerophis equoreus (Linneus).